



## Stafford County

### Water Source Overview

Major water sources include Abel Lake, Smith Lake, and groundwater wells.

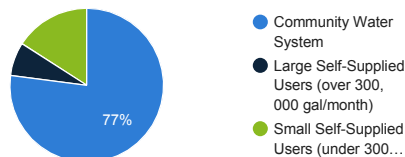
**\*Table 1:** Reported (2010) and projected (2040) water use by system type for Stafford County in MGD

Type	Reported Use 2010 MGD	Projected Use 2040 MGD
Community Water System	10.174	25.210
Large Self-Supplied Users (over 300,000 gal/month)	0.928	0.928
Small Self-Supplied Users (under 300,000 gal/month)	2.103	1.934

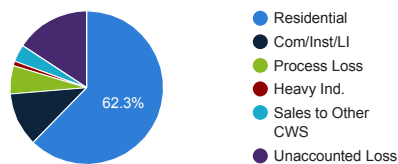
### Water Use by System Type

Approximately 22,798 people use private groundwater wells for residential water supply. All tables and graphs represent reported water use including Sales to other localities, if applicable.

**\*Figure 1:** Percentage of reported water use by system type in 2010 (No use data shown on graph if less than .01 MGD: Refer to Table 1)



**\*Figure 2:** Disaggregated water use percentages for Community Water Systems in 2010 (No graph shown if no disaggregated use data reported)



**\*Table 2:** Reported (2010) and projected (2040) groundwater and surface water use for Stafford County in MGD

Reported 2010 Groundwater Use (MGD)	Reported 2010 Surface Water Use (MGD)	Projected 2040 Groundwater Use (MGD)	Projected 2040 Surface Water Use (MGD)
2.55	10.65	2.40	25.67

**\*Figure 3:** Stafford County highlighted in the Commonwealth of Virginia



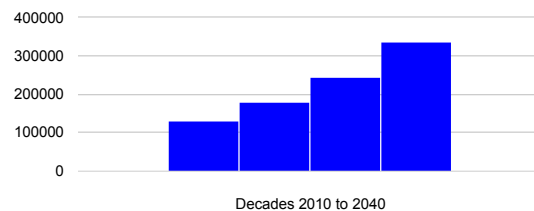
### Projected Water Demand

Population and demand are projected to increase through the planning period. A deficit of 14.7 MGD is anticipated in 2015. Plans to address the projected shortfall of municipal supply include the completion of the Rocky Pen Run Reservoir project and pursuing other surface water and groundwater alternatives as needed.

**\*Table 3:** Stafford County population projections by decade from 2010 to 2040 (data gathered from VEC projections - 05/20/13)

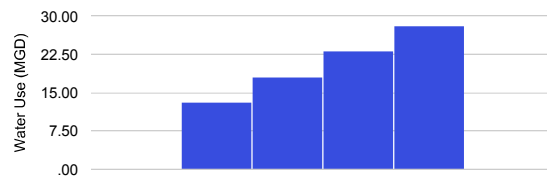
2010	2020	2030	2040	% Change (2010-2040)
128,961	178,152	244,410	333,654	160.2%

**\*Figure 4:** Stafford County population projections by decade for 2010, 2020, 2030 & 2040



**\*Table 4 & Figure 5:** Stafford County water demand trends by decade for 2010, 2020, 2030 & 2040 in MGD

Reported Use 2010 MGD	Projected Use 2020 MGD	Projected Use 2030 MGD	Projected Use 2040 MGD	Percent Change (2010-2040)
13.20	18.16	23.12	28.07	112.6%



### Drought Management Practices

The County adopted an ordinance for the implementation and enforcement of the Drought Response and Contingency Plan. (Stafford County WSP)